```
-WODEL-frame-n2p.model -DEV=xlp
-O-Cgg2_17USPTO_spool/6228611/runat_28082002_100210_13561/app_query.fasta_1.1639
-DB=Issued_Patents_AA - ORW=fasta_n -SUFFTX=rai -GAPOP=12.000
-DB=ISSUED_PATENTS_AA - ORW=fasta_n -SUFFTX=rai -GAPOP=12.000
-GAPEXT-4.000 -NINMACCH=0.100 -LOOPCI_0.000 -LOOPEXT=0.000
-FGAPOP=6.000 -PGAPEXT=0.050 -XGAPOP=10.000 -XGAPEXT-0.500
-FGAPOP=6.000 -PGAPEXT=7.000 -YGAPOP=10.000 -YGAPEXT-0.500
-FGAPOP=6.000 -DELEXT=7.000 -YGAPOP=10.000 -YGAPEXT-0.500
-FTANS-human40.cdi -LIST=45 -DOCALGAN-200 -THR_SCORE-pct
-THR_MAX=100 -THR_NIN=0 -ALIGN=15 -MODE-LOCAL -OUTFWT-Pfs
-NORM-ext -HEARIZE=500 -MINIEN=0 -MAXIEN=200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.3e-19
5.3e-19
5.3e-19
3.6e-18
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100 416.91 2.9e-16
281.00 401.05 2.0e-1
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480.09
465.18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     666.45
480.09
              out_format : pfs
                                                 About: Results were produced by the GenCore software, version 4.5, Copyright (c) 1993-2000 Compugen Ltd.
                                                                                                                                                                                                                     -USER-6728611_eCGN1_1_54 -NCPU-6 -ICPU-3 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -NO_XLPXY -WAIT -THREADS=1
OM of: US-08-711-417C-165 to: Issued_Patents_AA:*
                                                                                                                                                                                                                                                                                              Database: Issued_Patents_Ab_
Database sequences: 211528
Database length: 24425594
Search time (sec): 34.160000
                         Date: Aug 28, 2002 10:02 AM
                                                                                                                                                                                                                                                                      Query: US-08-711-417C-165
Query length: 1551
                                                                                    Command line parameters:
                                                                                                                                                                                                                                                           Search information block
                                                                                                                                                                                                                                                                                                                                                                                   score_list:
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803 1
728 1
                       356.77 4.7e-13
356.77 4.7e-13
356.77 4.7e-13
/cgn2_6/ptcdata/2/iaa/6A_COMB.pep:US-08-471-913A-117 + 253.00 356.77 4.7e-/cgn2_6/ptcdata/2/iaa/6B_COMB.pep:US-08-478-264A-117 + 253.00 356.77 4.7e-/cgn2_6/ptcdata/2/iaa/6B_COMB.pep:US-08-474-349A-117 + 253.00 356.77 4.7e-/cgn2_6/ptcdata/2/iaa/6B_COMB.pep:US-08-474-349A-117 + 253.00 356.77 4.7e-/cgn2_6/ptcdata/2/iaa/6B_COMB.pep:US-08-063-035-2 + 251.50 348.40 7.9e-13/cgn2_6/ptcdata/2/iaa/5B_COMB.pep:US-08-475-844-5 + 248.50 345.02 1.4e-12
                                                                                                                                                                Seq_documentation_block:
    Sequence 202, Application US/08711417C
    Sequence 202, Application US/08711417C
    Settle No. 6228611
    Settle No. 62290poulos, Katia A. TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE NUMBER OF SEQUENCES: 202
                                                                                                                                 seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:US-08-711-417C-202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51 CCCCCCTGTAAGCGATACTCCAGATGAGGGCGATGAGCCCATGCCGATCC 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Identity: 100.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Align seg 1/1 to: US-08-711-417C-202 from: 1 to: 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 10287/007001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/711,417C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Fish & Richardson P.C. STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 08/238,212
FILING DATE: 02-MAX-1994
APPLICATION NUMBER: 08/121,438
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 07/946,233
FILING DATE: 14-SEP-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein
FRAGMENT TYPE: internal
SEQUENCE DESCRIPTION: SEQ ID NO: 202:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-711-417C-165 x US-08-711-417C-202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELEFAX: 617/542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 05-Sep-1996
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 516 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 202: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ratio: 5.329
Percent Similarity: 100.000
                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
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Ratio: 5.329
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951 CATCAACTACCTGGGGCCGAGTCCCTGCGCCGCTGGTGCAGACGCCCC 1000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          751 GAAGACCTGTGCCAAGATAGGATCAGAGAGATCTCTCGTGCTGGACAGACT 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     701 GCACACTGTACCCAGTCATTAAAGAAGAAACTAAGCACAGTGAAATGGCA 750
                                                                                                                                                                                                                                                                                                                                                                  601 CACAAATGTGGATATTGTGGCCGAAGCTATAAACAGCGAACGTCTTTAGA 650
                                                                                                                                                                                                                                                                                                                                                                                                     651 GGAACATAAAGAGGGCTGCCACAACTACTTGGAAAGCATGGGCCTTCCGG 700
                                                                                                                                                                                                                                                                                                                                                                            501 TICCGGGGAGAAGCCCTTCAAATGCCACCTCTGCAACTACGCCTGCCGCC 550
                                                                                                                                                                                                                                                                                                      551 GGAGGGACGCCCTCACTGGCCACCTGAGGACGCACTCCGTTGGTAAACCT 600
                                                                                                                                                                                                                      401 ITCACAAAAGAAGCCACACTGGAGAAGGGCCCTTCCAGTGCAATCAGTGC 450
                                                                                                                                                                                                                               351 AAAGTGTGATATCTGTGGGATCATTTGCATCGGGCCCAATGTGCTCATGG 400
                                                                                                            251 TGCTTGATGCCTCGGGAGAAAATGAATGGCTCCCACAGGGACCAAGGC 300
                                                                                                                      201 TGGGCGTGCCTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAA 250
151 AGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAA 200
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APPLICANT: Georgopoulos, Katia A. TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE NUMBER OF SEQUENCES: 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1451 GIGAICCITITGAGIGCAACAIGIGCGGCIACCACAGCCAGGACCGGIAC 1500
                                                                                                                                                                                                                                                                                                                                                                                                               1401 CTTCCTGGATCACGTCATGTACACCATCCACATGGGCTGCCACGGCTTCC 1450
                                                                                                                                                                                                                                     1251 CCGACGCGCCAACGCGTGTCGCTCAAGGAGGAGCACCGCGCCTACGACC 1300
                                                                                                                                                                                                                                                                                                                                                        1301 TGCTGCGCCCGCCTCCGAGACTCGCAGGACGCGCTCCGCGTGGTCAGC 1350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1101 CGTGGAGTACCTGCTGCTCTCCAAGGCCAAGTTGGTGCCCTCGGAGC 1150
                                                                                                                                                                             1151 GCGAGGGGTCCCCGAGCAACAGCTGCCAAGACTCCACGGACACCGAGAGC 1200
                                                                                                                                                                                                                                                                                                                                                                        1501 GAGTICICGICGCACAIAACGCGAGGGGAGCACCGCTICCACAIGAGC 1548
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                                                                                                                                                                                             COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
SOFTWARE: PASLESD for Windows 95
SOFTWARE: PASLESD for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/711,417C
FILING DATE: 05-Sep-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/238,212
FILING DATE: 02-MAY-1994
PILING DATE: 14-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq_documentation_block:
    Sequence 196, Application US/08711417C
    Sequence 166, Application US/08711417C
    Sequence 196, Application US/08711417C
    Sequence 196, Application US/08711417C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
ZIP: 02110-2804
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         166 AATGTTAAAGTAGAGACTCAGAGTGATGAAGAATGGCCGTGCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         216 AATGAATGGGGAAGAATGTGCGGAGGATTTACGAATGCTTGATGCCTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  516 CITCAAATGCCACCICTGCAACTACGCCTGCCGCCGGAGGGACGCCCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  566 CTGGCCACCTGAGGACGCACTCCGTTGGTAAACCTCACAAATGTGGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            616 TGTGGCCGAAGCTATAAACAGCGAACGTCTTTAGAGGAACATAAAGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               366 TGGGATCATTTGCATCGGGCCCCAATGTGCTCATGGTTCACAAAAAAAGACCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                to: 461
                                            NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 10287/007001
                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                           Length:
                                                                                                                                                                                                                                                                                                                                                                                                                              from: 1
                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
SEQUENCE DESCRIPTION: SEQ ID NO: 196:
APPLICATION NUMBER: 07/946,233 FILING DATE: 14-SEP-1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                 US-08-711-417C-165 x US-08-711-417C-196
                                                                                     TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELEFAX: 617/542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                           to: US-08-711-417C-196
                                                                                                                             TELEX: 200154
INFORMATION FOR SEQ ID NO: 196:
SEQUENCE CHARACTERISTICS:
LENGTH: 461 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                       Ratio: 5.351
Percent Similarity: 100.000
                                                                                                                                                                                                                                                                                                                          Quality: 2467.00
                                                                                                                                                                                                                                                                 US-08-711-417C-196
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                                                                                                                                                                                                                                                                                                                                                                                  alignment_block
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1315
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434 ysAsnMetCysGlyTyrHisSerGlnAspArgTyrGluPheSerSerHis 450
                                                      284 alvalProValIleSerProMetTyrGlnLeuHisArgArgSerGluGly
167 qCysHisAsnTyrLeuGluSerMetGlyLeuProGlyThrLeuTyrProV
                                                                                                                                                                                                                                                                                 317 uLeuLeuSerLysAlaLysLeuValProSerGluArgGluAlaSerProS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGTGTCGCTCAAGGAGGAGCACCGCGCCTACGACCTGCTGCGCGCCGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     401 MetLysValTyrLysCysGluHisCysArgValLeuPheLeuAspHisVa
                                                                                                            ATAGGATCAGAGATCTCTCGTGCTGGACAGACTAGCAAGTAATGTCGC
                                                                                                                               CAAACGTAAGAGCTCTATGCCTCAGAAATTTCTTGGGGACAAGGGCCTGT
                                                                                                                                                                                                       CCGACACGCCCTACGACAGTGCCACGTACGAGAAGGAGGAGAATGATG
                                                                                                                                                                                                                                                                                                                                                                                                             GGCCGAGTCCCTGCGCCGCTGGTGCAGACGCCCCCGGGCGGTTCCGAGG
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                                    TCATTAAAGAAGAAACTAAGCACAGTGAAATGGCAGAAGACCTGTGCAAG
                                                                                                                                                                                                                                                                                                                                     AAGTCCCACGTGATGGACCAAGCCATCAACAACGCCATCAACTACCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1516 ATAACGCGAGGGGAGCACCGCTTCCACATGAGC 1548
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seq\_name: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep:US-08-711-417C-198

seg\_documentation\_block:

```
Sequence 198, Application US/08711417C
Patent No. 6228611
GENERAL INFORMATION:
APPLICANT GEOTOPOULOS, KATIA A.
TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE NUMBER OF SEQUENCES: 202
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESSE: Fish & Richardson P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101 CCGAGGACCTCTCCACCACCTCGGGAGGACAGCAAAGCTCCAAGAGTGAC 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 151 AGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAA 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51 CCCCCCTGTAAGCGATACTCCAGATGAGGGCGATGAGCCCATGCCGATCC 100
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows 95
SOFTWARE: FastSEQ for Windows 95
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/711,417C
FILING DATE: 05-Sep-1996
APPLICATION NUMBER: 08/238,212
FILING DATE: 02-MAY-1994
APPLICATION NUMBER: 08/121,438
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 07/946,233
APPLICATION NUMBER: 07/946,233
APPLICATION NUMBER: 07/946,233
APPLICATION NUMBER: 07/946,233
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 10287/007001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    from: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; SEQUENCE DESCRIPTION: SEQ ID NO: 198:
US-08-711-417C-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Myers, Louis P. REGISTRATION NUMBER: 35,965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-711-417C-165 x US-08-711-417C-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELEFAX: 617/542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Align seg 1/1 to: US-08-711-417C-198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 518 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 198:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein FRAGMENT TYPE: internal
                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Quality: 2437.00
Ratio: 4.913
Percent Similarity: 95.202
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                                                                                                                                                                                                                          CITY: Boston STATE: MA
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1001 CGGGCGGTTCCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCAC 1050
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCAACTACCTGGGGGCCGAGTCCCTGCGCCGCTGGTGCAGACGCCCC 1000
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                                                                                                                                                        101 SerSerAlaLeuSerGlyValGlyGlyIleArgLeuProAsnGlyLysLe 117
                                                                                                                                                                                                         351 AAAGIGIGAIATCIGIGGGAICATIIGCAICGGGCCCAAIGIGCICAIGG 400
                                                                                                                                                                                                                         401 ITCACAAAAGAAGCCACACTGGAGAACGGCCCTTCCAGTGCAATCAGTGC 450
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                                                                                                                                                                                                                                                                                                                                                                 501 TICCGGGGAGAAGCCCTICAAATGCCACCTCTGCAACTACGCCTGCCGCC
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                                                                                                                                      301 AGCTCGGCTTTGTCGGGAGTTGGAGGCATTCGACTTCCTAACGGAAAACT
                                                                                                                                                                                                                                                                                                                                             GGGCCTCATTCACCCAGAAGGGCAACCTGCTCCGGCACATCAAGCTGCA
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4.863 87.215

Ratio:

Percent Similarity:

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APPLICANT:
TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
NUMBER OF SEQUENCES: 152
COMPUTER READABLE FORM:
MEDIUM TYPE: Rloppy disk
COMPUTER: ISH PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                        1247
                                                                                                                                                                                                                                                                                                                                                                                           1435
                                                1294
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464
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                                                                                                                                                                                                         431 yrGluValLeuArgAlaAlaSerGluAsnSerGlnAspAlaPheArgVal
                                                                                                                                                                                                                                                                                                                                          448 ValSerThrSerGlyGluGlnLeuLysValTyrLysCysGluHisCysAr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1295 ACGACCTGCTGCGCCCCTCCGAGAACTCGCAGGACGCGCTCCGCGTG
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/08743
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 946,233
FILING DATE: 14-SEP-1992
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (617)2275941
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
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TYPE: amino acid
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MOLECULE TYPE: peptide
FRAGMENT TYPE: internal
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514 gTyrHisLeuSer 518
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571

Length:

Quality: 2422.00

alignment\_scores:

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IGCITGATGCCTCGGGAGAAAATGAATGGCTCCCACAGGGACCAAGGC 300
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                                                                                                                                                                                                                                                                        101 CCGAGGACCTCTCCACCACCTCGGGAGGACAGCAAAGCTCCAAGAGTGAC 150
                                                                                                                                                                                                                                                                                                                                         151 AGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAA 200
                                                                                                                                                                                                                                                                                                                                                                                                            TGGGCGTGCCTGTGAATGAATGGGGAAGAATGTGCGGAGGATTTACGAA 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101 SerSerAlaLeuSerGlyValGlyGlyIleArgLeuProAsnGlyLysLe 117
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGCCCTCATTCACCCAGAAGGGCAACCTGCTCCGGCACATCAAGCTGCA 500
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                                                                                                                                                                                                                                                                                        234 rgArgAspAlaLeuThrGlyHisLeuArgThrHisSerValGlyLysPro 250
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Percent Identity: 82.137
                                                                                                  Align seg 1/1 to: PCT-US93-08743-5 from: 1. to: 568
                                                 alignment_block:
US-08-711-417C-165 x PCT-US93-08743-5
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564 gTyrHisLeuSer 568

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1098 CGCCGTGGAGTACCTGCTGCTCTCCAAGGCCAAGTTGGTGCCCTCGG 1147
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                                                                                                                                                                                                                                   801 ACCAAGTAATGTCGCCAAACGTAAGAGCTCTATGCCTCAGAAATTTCTTG 850
                                                                                                                                                                                                                                                         316 uAlaSerAsnValAlaLySArgLySSerSerMetProGlnLySPheLeuG 333
                                                                                                                                                                                                                                                                                                                   851 GGGACAAGGGCCTGTCCGACACGCCCTACGACAGTGCCACGTACGAGAAG 900
267 uGluHisLysGluArgCysHisAsnTyrLeuGluSerMetGlyLeuProG 284
                                                                                                      284 ly...MetTyrProValIleLysGluGluThrAsnHisAsnGluMetAla 299
                                                                                                                                                   751 GAAGACCIGIGCAAGAIAGGAICAGAGAGAICICICGIGCIGGACAGACI 800
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seq_documentation_block:
Sequence 153, Application US/08465590
Sequence 153, Application US/08465590
Setent No. 5824770
GENERAL INFORMATION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 164
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREFT: 60 STATE STREET, Suite 510
CITY: BOSTON
STATE: MASSACHUCETS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      210 CTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAATGCTTGATG 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260 CCTCGGGAGAGAAATGAATGGCTCCCACAGGGACCAAGGCAGCTCGGCT 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160 GCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAATGGGCGTGC 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 AlaSerAsnValLysValGluThrGlnSerAspGluGluAsnGlyArgAl 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 acysGluMetasnGlyGluGluCysAlaGluAspLeuArgMetLeuAspA 36
seg_name: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:U$-08-465-590-153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Identity: 90.385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Align seg 1/1 to: US-08-465-590-153 from: 1 to: 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: ASCII (text)
SOFTWARE: ASCII (text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/465,590
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/238,212
FILING DATE: 02-WAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/121,438
FILING DATE: 14-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/946,233
FILING DATE: 14-SEP-1992
ATTORNEY AGENT INFORMATION:
NAME: MAGES DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: MPG-006C2DV TELECOMMUNICATION INFORMATION: TELEPHONE: (617)227-7400
                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             alignment_block:
US-08-711-417C-165 x US-08-465-590-153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Myers, Paul L. REGISTRATION NUMBER: 35,695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (617)227-5941
INFORMATION FOR SEQ ID NO: 153:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 470 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide FRAGMENT TYPE: C-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Quality: 2207.50
Ratio: 5.098
nllarity: 92.521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amino acid
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                                                                                                                                                                                                                                                                                                                                                                             ZIP: 02109
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36	aSerGlyGluLysMetAsnGlySerHisArgAspGlnGlySerSerAl	(1)
1 10	TIGLICOGGAGITGGAGGATTCGAGTTCCTAACGGAAACTAAAGTGTGA 	359 69
360 9	TATCTGTGGGATCATTGCATCGGGCCCAATGTGCTCATGGTTCACAAA 	409 86
410	GAAGCCACACTGGAGAACGCCCTTCCAGTGCAATCAGTGCGGGG 	459
460	TTCACCCAGAAGGGCAACCTGCTCCGGCACATCAAGCTGCATTCCGGGGA 	509 119
510 119	GAAGCCTTCAAATGCCACCTCTGCAACTACGCCTGCCGCCGGAGGGACG 	559 136
560 136	CCCTCACTGGCCACCTGAGGACGCACTCCGTTGGTAACCTCACAAATGT	609 152
610 153	GGATATTGTGGCCGAACTATAAACACGCAACGTCTTTAGAGGAACATAA (	659 169
660	AGAGGGTGCCACAACTACTTGGAAAGCATGGGCCTTCCGGGCACACTGT	709 186
7.10	ACCCAGTCATTAAAGAAGAAACTAAGCACAGTGAAATGGCAGAAGACCTG 7	759 202
760 203	TGCAAGATAGGATCAGAGAGTCTCGTGCTGGAGAGAGACTAGCAAGTAA E	809 219
810 219	AGAGCICTATGCCICAGAAATTICTTGGGGACAAGG	859 236
	GCCCTACGACAGTGCCACGTACGAGAAGAGAACGAA ::	909
	9GACCAAGCCATCAACACGCCATCAACTA 	959
960	CCTGGGGGCCGAGTCCCTGCGCCCGCTGGTGCAGACGCCCCCGGGCGGTT 1	1009
010 286	CCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCACAGGCGC 1 	1056 302
303	TCGGAGGGCACCCCGCGCTCCAACCACTCGGCCCAGGACAGCGCCGTGGA 1 	106
319	GTACCTGCTGCTCCCAAGGCCAAGTTGGTGCCCTCGGAGGCGCGAGG 1	.156 136
157 336	CGTCCCCGAGCAACAGCTGCCAAGACTCCACGGACACCGAGAACAAC 1	1206

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1257 CGCG...CAACGCGTGTCGCTCAAGGAGGAGCACCGCGCCTACGACCTGC 1303
                                                                                                                                                                    1304 TGCGCGCCGCCTCCGAGAACTCGCAGGACGCGCTCCGCGTGGTCAGCACC 1353
1207 GAGGAGCAGCGAGCGGTCTTATCTACCTGACCAACCACATCGCCCGACG 1256
                                                                                                                                                                                                                                                                                                                                  1404 CCTGGATCACGTCATGTACACCATCCACATG......GGCTGCCACG 1444
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                                                                                                                                                                                                                                                                                                                                                                                                                   353 GluGlnGlnArgSerGlyLeulleTyrLeuThrAsnHisIle******* 369
                                                                                                             453 ArgTyrGluPheSerSerHislleThrArgGlyGluHisArg***His** 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13, Application US/08283300A
Patent No. 6172278
GENERAL INFORMATION:
APPLICANT: GEOTOPOPULOS, Katia A.
TITLE OF INVENTION: IKAROS TRANSGENIC CELLS AND ANIMALS
NUMBER OF SEQUENCES: 26
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 STATE STREET, Suite 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:US-08-283-300A-13
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APPLICATION NUMBER: US 08/238,212
FILING DATE: 02-MAY-94
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/121,438
FILING DATE: 14-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/946,233
FILING DATE: 14-SEP-1992
ATOMNEY AGENT INFORMATION:
NAME: MYGIS, PAUL L.
REGISTRATION NUMBER: 35,695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: ASCII (text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/283,300A
FILING DATE:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617)227-7400
TELEFAX: (617)227-5941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: BOSTON
STATE: MASSACHUSETTS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
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203 CysLysIleGly***GluArgSerLeuValLeuAspArgLeuAlaSerAs 219
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                760 TGCAAGATAGGATCAGAGATCTCTCGTGCTGGACAGACTAGCAAGTAA 809
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAGCCCTTCAAATGCCACCTCTGCAACTACGCCTGCCGCCGGAGGGACG 559
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        310 ITGTCGGGAGTTGGAGGCATTCGACTTCCTAACGGAAAACTAAAGTGTGA 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360 TATCIGIGGGATCATITGCATCGGGCCCAATGIGCTCATGGTTCACAAAA 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTCGGGAGAGAAATGAATGGCTCCCACAGGGACCAAGGCAGCTCGGCT 309
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                                                                                                                                                                                                                                                                                                                                                                                                                      210 CIGIGAAAIGAAIGGGAAGAAIGIGCGGAGGAITIACGAAIGCITGAIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 aCysGluMetAsnGlyGluGluCysAlaGluAspLeuArgMetLeuAspA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160 GCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAATGGGCGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Identity: 90.385
                                                                                                                                                                                                                                                                                                                    Align seg 1/1 to: US-08-283-300A-13 from: 1 to: 470
                                                                                                                                                                                                                     Gaps:
                                                                                                                                                                                                                                                                      alignment_block:
US-08-711-417C-165 x US-08-283-300A-13
INFORMATION FOR SEQ ID NO: 13:
              SEQUENCE CHARACTERISTICS:
LENGTH: 470 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                TOPOLOGY: linear
MOLECULE TYPE: peptide
FRAGMENT TYPE: C-terminal
                                                                                                                                                                                                 Quality: 2207.50
Ratio: 5.098
Percent Similarity: 92.521
                                                                                                                                    US-08-283-300A-13
                                                                                                                                                                                       alignment_scores:
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seq_name: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:PCT-US95-09345-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1495 CGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCACCGCTTCCACAT 1544
                                                                                                                                                                                                                                                                                                                                                                                                                             CGCG...CAACGCGTGTCGCTCAAGGAGGAGCACCGCGCGCTACGACCTGC 1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTTCCGTGATCCTTTTGAGTGCAACATGTGCGGCTACCACAGCCAGGAC 1494
                                                                                                                                                                                                                                                                                                        TCGGAGGGCACCCCGCGCTCCAACCACTCGGCCCAGGACAGCGCCGTGGA 1106
                                                                                                                                                                                                                                                                                                                                                                   1107 GTACCTGCTGCTCTCCAAGGCCAAGTTGGTGCCCTCGGAGCGCGAGG 1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGAGCAGCGCAGCGGTCTTATCTACCTGACCAACCACATCGCCCGACG 1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1304 TGCGCGCCCCCCCGAGAACTCGCAGGACGCGCTCCGCGTGGTCAGCACC 1353
                                                                                                                                                                               ccreeeeecceaerccreeecceecreerecaeacecceeeeerr 1009
                                                                                                                                                                                                                                            1010 CCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCAC...AGGCGC 1056
                                                                                                                                                                                                                                                                                                                                                                                        419 eLeuaspHisValMetTyrThrIleHisMet*******GlyCysHisG 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            286 erGluValValProValIleSerProMetTyrGlnLeuHis****** 302
                                                                        910 ATGATGAAGTCCCACGTGATGGACCAAGCCATCAACAACGCCATCAACTA 959
                                                                                                                                       860 GCCTGTCCGACACGCCCTACGACAGTGCCACGTACGAGAAGGAGAACGAA 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Georgopoulos, Katia A.
TITLE OF INVENTION: IKAROS TRANSGENIC CELLS AND ANIMALS
NUMBER OF SECUENCES: 26
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    810 TGTCGCCAAACGTAAGAGCTCTATGCCTCAGAAATTTCTTGGGGACAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13, Application PC/TUS9509345 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq_documentation_block:
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210 CTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAATGCTTGATG 259
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/283,300
FILING DATE: 29-ULX-94
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/238,212
FILING DATE: 02-MAY-94
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/121,438
FILING DATE: 14-SEP-1993
PRIOR APPLICATION NUMBER: US 07/946,233
FILING DATE: 14-SEP-1993
ATTORNEY APPLICATION NUMBER: US 07/946,233
FILING DATE: 14-SEP-1992
ADDRESSEE: LAHIVE & COCKFIELD STREET: 60 STATE STREET, Suite 510
                                                                                                                                                                                 SURTHWARE: ASCII (text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/09345
FILING DATE:
                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alignment_block:
US-08-711-417C-165 x PCT-US95-09345-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: MGP-(TELECOMMUNICATION INFORMATION: TELEPHONE: (617)227-7400
TELERAX: (617)227-5941
INFORMATION FOR SEQ ID NO: 13: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Myers, Paul L. REGISTRATION NUMBER: 35,695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 470 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: peptide FRAGMENT TYPE: C-terminal
                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS: single
                                                          STATE: MASSACHUSETTS
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Quality: 2207.50
Ratio: 5.098
nilarity: 92.521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
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                                         BOSTON
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                                                                                              02109
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1010 CCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCAC...AGGCGC 1056
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1107 GTACCTGCTGCTCTCCAAGGCCAAGTTGGTGCCCTCGGAGCGCGAGG 1156
                     CCTGGGGGCCGAGTCCCTGCGCCGGTGCAGACGCCCCCGGGCGGTT 1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1157 CGTCCCCGAGCAACAGCTGCCAAGACTCCACGGACACCGAGGAGCAACAAC 1206
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                                                                                                                                                                                                                                            610 GGATATTGTGGCCGAAGCTATAAACAGCGAACGTCTTTAGAGGAACATAA 659
                                                                                                                                                                                                                                                                                                                                                                        660 AGAGCGCTGCCACAACTACTTGGAAAGCATGGGCCTTCCGGGCACACTGT 709
                                                                                                                                                                                                                                                                                                                                                                                              710 ACCCAGTCATTAAAGAAGAACTAAGCACAGTGAAATGGCAGAAGACCTG 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  760 IGCAAGAIAGGAICAGAGAGAICICICGIGCIGGACAGAÇIAGCAAGIAA 809
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   319 ****LeuLeuLeuLeuSerLysAlaLys***Val***SerGluArgGluA 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              410 GAAGCCACACTGGAGAACGGCCCTTCCAGTGCAATCAGTGCGGGGCCTCA
                                                                        460 TTCACCCAGAAGGCAACCTGCTCCGGCACATCAAGCTGCATTCCGGGGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          353 GluGluGlnArgSerGlyLeuIleTyrLeuThrAsnHisIle******
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Sequence 153, Application US/08711417C
Sequence 153, Application US/08711417C
Batent No. 6228611
GENERAL INFORMATION:
APPLICANT: Georgopoulos, Katia A.
TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE NUMBER OF SEQUENCES: 202
1304 TGCGCGCCCCCCCGAGAACTCGCAGGACGCGCTCCGCGGGGTCAGCACC 1353
                                                                                                                                                                                                                                                                                                                                                                                1495 CGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCACCGCTTCCACAT 1544
                                                                                              1354 AGCGGGGAGCAGATGAAGGTGTACAAGTGCGAACACTGCCGGGTGCTCTT 1403
                                                                                                                                                                                            1404 CCTGGATCACGTCATGTACACCATCCACATG......GGCTGCCACG 1444
                                                                                                                                                                                                                                                                                     1445 GCTTCCGTGATCCTTTTGAGTGCAACATGTGCGGCTACCACAGCCAGGAC 1494
                      403 SerGlyGluGln***LysValTyrLysCysGluHisCysArgValLeuPh 419
                                                                                                                                                                                                                       seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:US-08-711-417C-153
                                                                                                                                                                                                                                                                                                                     CORPUTEST ISM COMPUTED.

OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/711,417C
FILING DATE: 05-Sep-1996
PRIOR APPLICATION NUMBER: 08/238,212
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 08/121,438
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 07/946,233
FILING DATE: 14-SEP-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 10287/007001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELEPHONE: 617/542-806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 470 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO: 153
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: peptide
FRAGMENT TYPE: C-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       200154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq_documentation_block
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1545 GAGC 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                469 *Ser 470
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860 GCCTGTCCGACACGCCCTACGACAGTGCCACGACGAGAAGGAGAACGAA 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     410 GAAGCCACACTGGAGAACGGCCCTTCCAGTGCAATCAGTGCGGGGCCTCA 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          460 TTCACCCAGAAGGGCAACCTGCTCCGGCACATCAAGCTGCATTCCGGGGA 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         510 GAAGCCCTTCAAATGCCACCTCTGCAACTACGCCTGCCGCCGGAGGGACG 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660 AGAGCGCTGCCACAACTACTTGGAAAGCATGGGCCTTCCGGGCACACTGT 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                710 ACCCAGTCATTAAAGAAGAAACTAAGCACAGTGAAATGGCAGAAGACCTG 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   760 TGCAAGATAGGATCAGAGGATCTCTCGTGCTGGACAGACTAGCAAGTAA 809
                                                                                                                                                                                                                                                                                           210 CIGIGAAAIGAAIGGGGAAGAAIGIGCGGAGGAITITACGAAIGCITGAIG 259
                                                                                                                                                                                                                                                                                                                                                    260 CCTCGGGAGAAAATGAATGGCTCCCACAGGGACCAAGGCAGCTCGGCT 309
                                                                                                                                                                                                                                                                                                                                                                                                               310 TIGICGGGAGITGGAGGCATTCGACTTCCTAACGGAAAACTAAAGTGTGA 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   209
                                                                                                                                                                                                                                  203 CysLyslleGly***GluArgSerLeuValLeuAspArgLèuAlaSerAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              810 IGTCGCCAAACGTAAGAGCTCTATGCCTCAGAAATTTCTTGGGGACAAGG
                                                                                                                                                                                                                                                                                                                                                                     CCCTCACTGGCCACCTGAGGACGCACTCCGTTGGTAAACCTCACAAATGT
                                                                                                                                                                                                         to: 470
                                                                                                                               Percent Identity: 90.171
; SEQUENCE DESCRIPTION: Xea = any amino acid; SEQUENCE DESCRIPTION: SEQ ID NO: 153: US-08-711-417C-153
                                                                                                    Length:
                                                                                                                     Gabs:
                                                                                                                                                                                                      Align seg 1/1 to: US-08-711-417C-153 from: 1
                                                                                                                                                               alignment_block:
US-08-711-417C-165 x US-08-711-417C-153
                                                                                                   Quality: 2202.50
Ratio: 5.087
Percent Similarity: 92.521
                                                                                         alignment_scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
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APPLICANT: Georgopoulos, Katia A.
TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
NUMBER OF SEQUENCES: 202
                                                                                  960 CCTGGGGGCCGAGTCCCTGCGCCGCTGCAGACGCCCCCGGGCGGTT 1009
                                                                                                                                         1010 CCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCAC...AGGCGC 1056
                                                                                                                                                                                                    1057 TCGGAGGCACCCCGCGCTCCAACCACTCGGCCCAGGACAGCGCCGTGGA 1106
236 **LeuSerAsp***ProTyrAspSerAla***TyrGluLysGlu***** 252
                            910 ATGATGAAGTCCCACGTGATGGACCAAGCCATCAACACGCCATCAACTA 959
                                           1107 GTACCTGCTGCTCTCCAAGGCCAAGTTGGTGCCCTCGGAGGGGGGG 1156
                                                                                                                                                                                                                                                                                                                     1157 CGTCCCCGAGCAACAGCTGCCAAGACTCCACGGACACCGAGGAGCAACAAC 1206
                                                                                                                                                                                                                                                                                                                                                                             1207 GAGGAGCAGCGCAGCGGTCTTATCTACCTGACCAACCACATCGCCCGACG 1256
                                                                                                                                                            1304 TGCGCCGCCGCCTCCGAGAACTCGCAGGACGCGCTCCGCGTGGTCAGCACC 1353
                                                                                                                                                                                                                                                                            319 ****LeuLeuLeuLeuSerLysAlaLys***Val***SerGluArgGluA 336
                                                                                                                                                                                                                                                                                                                                                                                                                                       1257 CGCG...CAACGCGTGTCGCTCAAGGAGGAGCACCGCGCGCTACGACCTGC 1303
                                                                                                                                                                                                                                                                                                                                    1354 AGCGGGGAGCAGATGAAGGTGTACAAGTGCGAACACTGCCGGGTGCTCTT 1403
                                                                                                                                                                                                                                                                                                                                                                                                1404 CCTGGATCACGTCATGTACACCATCCACATG......GGCTGCCACG 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1445 GCTTCCGTGATCCTTTTGAGTGCAACATGTGCGGCTACCACAGCCAGGAC 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1495 CGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCACCGCTTCCACAT 1544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:US-08-711-417C-197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C. STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 197, Application US/08711417C Patent No. 6228611 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seq_documentation_block:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1545 GAGC 1548
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51 CCCCCTGTAAGGGATACTCCAGATGAGGGCGATGAGCCCATGCCGATCC 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101 CCGAGGACCTCTCCACCACCTCGGGAGGACAGGCAAAGCTCCAAGAGTGAC 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    151 AGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAA 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201 IGGGCGTGCCTGTGAATGAATGGGGGAAGAATGTGCGGGAGGATTTACGAA 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         251 TGCTTGATGCCTCGGGAGAAAATGAATGGCTCCCACAGGGACCAAGGC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 AGCTCGGCTTTGTCGGGAGTTGGAGGCATTCGACTTCCTAACGGAAAACT 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51 ArgGlyMetalaSerAsnvalLysValGluThrClnSerAspGluGluAs 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        67 nGlyArgAlaCysGluMetAsnGlyGluGluCysAlaGluAspLeuArgM 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
APPLICATION DATA:
APPLICATION NUMBER: US/08/711,417C
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Align seg 1/1 to: US-08-711-417C-197 from: 1 to: 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Identity: 74.280
                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 10287/007001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
                                                                                                                                                              APPLICATION NUMBER: 08/238,212
FILING DATE: 02-MAY-1994
APPLICATION NUMBER: 08/121,438
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 07/946,233
FILING DATE: 14-SEP-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
FRAGMENT TYPE: internal
US-08-711-417C-197:
                                                                                                                                                                                                                                                                                       NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELEFAX: 617/542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-711-417C-165 x US-08-711-417C-197
                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 432 amino acids
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 197:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Quality: 1963.00
Ratio: 4.776
Percent Similarity: 78.887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     alignment_scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alignment_block
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351 AAAGTGTGATATCTGTGGGATCATTTGCATCGGCCCAATGTGCTCATGG 400 
01 TTCACAAAAGAAGC
51 GGGCCTCAT
01 TTCCGGGGAGAAGCCCTT
51 GGAGGGACG 
01 CACAAATGTGGATATTGTGGCCGAAGCTATAAACAGCGAAC
96
rggaaagcatgggccttccg(
96
01 GCACACTCTACCCAGTCATTACACACACACACACACACAC
GAGATCTCTCGTGCTGGACAGAC
96
01 AGCAAGTAATGTCGCCAAACGTAAGAGCTCTATGCCTCAGAAA
197 g 197
GGACAAGGGCCTGTCCGACAC          yAsplysCysLeuSerAspMe
01 GAGAA      4 Glu
51 CATCAACTACCTGGGGGCCGAG
01 CGG             46 roG
51 AGGCGCTC ::: 63 LysProProSe
98 CGCCGTGGAG7        :: 79 AlaValAsp
48 AGCGCGAGG 
B AGCA
48 GGCCGACGCGCGCAACGCGTGTCGCTCAAC

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1436 GCTGCCACGGCTTCCGTGATCCTTTTGAGTGCAACATGTGCGGCTACCAC 1485
                                                                                                          1295 ACGACCTGCTGCGCGCCCTCCGAGAACTCGCAGGACGCGCTCCGCGTG 1344
                                                                                                                                                                                                                                                    seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:US-08-711-417C-195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM 11EE: LIBANCHEE
COMPUTER: IEM COMPALIBLE
COMPUTER: IEM COMPALIBLE
OPERATING SYSTEM: Windows 95
SOFTWARE: PASLESE for Windows Version 2.0b
SOFTWARE: PASLESE for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: 08/238,212
APPLICATION DATA:
APPLICATION NUMBER: 08/21,438
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 08/421,438
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 07/946,233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 10287/007001
TELECOMMULICATION INFORMATION:
TELEPHONE: 611/542-5070
TELEPHONE: 617/542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 431 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX: 200154
INFORMATION FOR SEQ ID NO: 195:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                        1536 CTTCCACATGAGC 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                             |:::|||::|||
428 gTyrHisLeuSer 432
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; SEQUENCE DESCRIPTION: SEQ ID NO: 195: US-08-711-417C-195

Align seg 1/1 to: US-08-711-417C-195 from: 1 to: 431

200	GGGGCCTCATTCACCCAGAAGGGCAAACCTGCTCCGGCACATCAAGCTGCA	451
63		54
450	TTCACAAAAGAAGCCACACTGGAGAACGGCCCTTCCAGTGCAATCAGTGC	401
53		53
400	AAAGTGTGATATCTGTGGGATCATTTGCATCGGGCCCAATGTGCTCATGG	351
53		53
350	AGCTCGGCTTTGTCGGGAGTTGGAGGCATTCGACTTCCTAACGGAAAACT	301
53		53
300	TCCTTCATGCCTCGGGAGAAAATGAATGGCTCCCACAGGGACCAAGGC	251
53		53
250	TGGGCGTGCCTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAA	201
53	ArgGlyMet	51
200	AGAGTCGTGGCCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAA	151
20	34 roGluAspLeuSerThrThrSerGlyAlaGlnGlnAsnSerLysSerAsp	3
150	CCGAGGACCTCTCCACCACCTCGGGAGGACAGCAAAGCTCCAAGAGTGAC	101
34	17 rProProValSerAspThrProAspGluGlyAspGluBroMetProValP	7
100	51 CCCCCTGTAAGCGATACTCCAGATGAGGGCGATGAGCCCATGCCGATCC	Ŋ
17	1 MetAspvalAspGluGlyGlnAspMetSerGlnValSerGlyLysGluSe	
50	1 ATGGATGCTGACGAGGGTCAAGACATGTCTTTCTCATCAGGGAAGGAA	

1001 CGGCGGTTCCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCAC 1050 801 AGCAAGTAATGTCGCCAAACGTAAGAGCTCTATGCCTCAGAAATTTCTTG 850 951 CATCAACTACCTGGGGGCCGAGTCCCTGCGCCCGCTGGTGCAGACGCCCC 1000 1051 AGG...CGCTCGGAGGGCACCCCGCGCTCCAACCACTCGGCCCAGGACAG 1097 1098 CGCCGTGGAGTACCTGCTGCTGCTCCCAAGGCCAAGTTGGTGCCCTCGG 1147 1197 851 GGGACAAGGGCCTGTCCGACACGCCCTACGACAGTGCCACGTACGAGAAG 900 213 Glu...AspMetMetThrSerHisValMetAspGlnAlaIleAsnAsnAl 228 1248 CGCCCGACGCGCGCAACGC...GTGTCGCTCAAGGAGGAGCACCGCGCCT 1294 1295 ACGACCTGCTGCGCCGCCTCCGAGAACTCGCAGGACGCGCTCCGCGTG 1344 1395 GGTGCTCTTCCTGGATCACGTCATGTACACCATCCACATG.......G 1435 1436 GCTGCCACGGCTTCCGTGATCCTTTTGAGTGCAACATGTGCGGCTACCAC 1485 GAGAACGAAATGATGAAGTCCCACGTGATGGACCAAGCCATCAACAACGC 950 1345 GTCAGCACCAGCGGGGAGCAGATGAAGGTGTACAAGTGCGAACACTGCCG 1394 1486 AGCCAGGACCGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCACCG 1535 278 .AlaValAspAsnLeuLeuLeuLeuSerLysAlaLysSerValSerSerG 294 344 GAAGACCTGTGCAAGATAGGATCAGAGAGATCTCTCGTGCTGGACAGACT 1148 AGCGCGAGGGTCCCCGAGCAACAGCTGCCAAGACTCCACGGACACCGAG 1536 CTTCCACATGAGC 1548 427 gTyrHisLeuSer 431 196 901

seq\_name: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep:US-08-711-417C-201
seq\_documentation\_block:
; Sequence 201, Application US/08711417C

```
Patent No. 6228611
GENERAL INFORMATION:
APPLICANT: Georgopoulos, Katia A.
TILLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
NUMBER OF SEQUENCES: 202
CORRESPONDENCE ADDRESS: Sichardson P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 471 GGGCAACCTGCTCCGGCACATCAAGCTGCATTCCGGGGAGAAGCCCTTCA 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          521 AATGCCACCTCTGCAACTACGCCTGCCGCGGAGGGACGCCCTCACTGGC 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  621 CCGAAGCTATAAACAGCGAACGTCTTTAGAGGAACATAAAGAGCGCTGCC 670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      571 CACCTGAGGACGCACTCCGTTGGTAAACCTCACAAATGTGGATATTGTGG 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT IBM Compatible
COMBUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/711,417C
FILING DATE: 05-Sep-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/213
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 07/946,233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Align seg 1/1 to: US-08-711-417C-201 from: 1 to: 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps: 1
Percent Identity: 88.830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 10287/007001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELERAX: 617/542-8906
TELEX: 200154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear

MOLECULE TYPE: protein

FRAGMENT TYPE: internal

SEQUENCE DESCRIPTION: SEQ ID NO: 201:

US-08-711-417C-201
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US-08-711-417C-165 x US-08-711-417C-201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 334 amino acids TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: 200154
INFORMATION FOR SEQ ID NO: 201:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Quality: 1740.00
Ratio: 5.210
Percent Similarity: 88.830
                                                                                                                                                                                              CITY: Boston
                                                                                                                                                                                                                       STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       alignment_scores:
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26	2 5	99
671	ĕ	720
57	lile	
721	aaagaagaaactaagcacagtgaaatggcagaagacctgtgcaagatagg 7 	770
771	CAGAGAGATCTCTCGTGCTGGACAGACTAGCAAGTAATGTCGCCAAAC	820 92
821	TAAGAGCTCTATGCCTCAGAAATTTCTTGGGGACAAGGGCCTGTCGGACAGGGCCTGTCGGACAGGACTGTCGAGAAGAAATTTCTTAGGAAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGA	870 108
-	GCCCTACGACAGTGCCACGTACGAGAAGGAGAACGAAATGATGAAGTC	920
921	CACGTGATGGACCAAGCCATCAACTAACTGGGGCG CACGTGATGGACCAAGCCATCAACTAACTGGGGCCG	
L 4	GTCCCTGCGCCCTGGTGCAGACGCCCCCGGGGGGGTTCCGAGGTGGTCCTTLIIIIIIIIIIIIIIIIIIIIIIIIIIIII	1020 158
1021	PAGCCCGATGTACCAGCTGCACAGGCGCTCGGAGGCACCCCCCCC	1070 175
1071	GCGCTCCAACCACTCGGCCCAGGACAGCGCCGTGGAGTACCTGCTGCTGCTGCTGCTGCTGCAGATATTTTTTTT	1120 192
9 2	CTCCAAGGCCAAGTTGGTGCCCT 	1170 208
1171	AAG 	1220 225
0 0	TTATCTACCTGACCA 	1270 242
1271	CGCTCAAGGAG	1320 258
1321 259	AACTC	1370 275
1371	GGIGTACAAGTGCGAACACTGCCGGGTGCTCTTCCTGGATCACGTCATGT 	1420 292
1421	ACACCATCCACATGGGCTGCCACGGCTTCCGTGATCCTTTTGAGTGCAAC	1470 308
1471	ATGTGCGGCTACCACAGCCAGGACCGGTACGAGTTCTCGTCGCGCACATAAC	1520 325
1521	GCGAGGGAGCACCGCTTCCACATGAGC	

## APPLICANT: Georgopoulos, Katia A. TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE THIBE OF SEQUENCES: 202 CORRESPONDENCE ADDRESS: STREET: 225 Franklin Street CITY: Boston 51 CCCCCCTGTAAGCGATACTCCAGATGAGGCGATGAGCCCATGCCGATCC 100 101 CCGAGGACCTCTCCACCACCTCGGGAGGACAGCAAAGCTCCAAGAGTGAC 150 seq\_name: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep:US-08-711-417C-199 COMPUTER: IBM Compatible OPERATING SYSTEM: Windows 95 SOFTWARE: FastSEQ for Windows Version 2.0b CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/711,417C FILING DATE: 05-Sep-1996 PRIOR APPLICATION DATA: Align seg 1/1 to: US-08-711-417C-199 from: 1 to: 390 Gaps: 7 Percent Identity: 65.835 NAME: Wers, Louis P. REGISTRATION NUMBER: 35,965 REFERENCE/DOCKET NUMBER: 10287/007001 TELEPHONE: 617/542-5070 TELEPHONE: 617/542-8906 TELEPA: 200154 INFORMATION FOR SED ID NO: 199: SEQUENCE CHARACTERISTICS: LENGTH: 390 amino acid APPLICATION NUMBER: 08/238,212 FILING DATE: 02-YAX-1994 APPLICATION NUMBER: 08/121,438 FILING DATE: 14-SEP-1993 APPLICATION NUMBER: 07/946,233 FILING DATE: 14-SEP-1992 ATTORNEY/AGENT INFORMATION: ; TOPOLOGY: linear ; MOLECULE TYPE: protein ; FRAGMENT TYPE: internal ; SEQUENCE DESCRIPTION: SEQ ID NO: 199: US-08-711-417C-199 325 rArgGlyGluHisArgPheHisMetSer 334 Sequence 199, Application US/08711417C Patent No. 6228611 GENERAL INFORMATION: alignment\_block: US-08-711-417C-165 x US-08-711-417C-199 COUNTRY: USA ZIP: 02110-2804 COMPUTER READABLE FORM: MEDIUM TYPE: Diskette alignment\_scores: Quality: 1681.00 Ratio: 4.556 Percent Similarity: 70.825 seq\_documentation\_block:

CCTGTGAAATGAGGAAAATGGGGAAGAATGCCTGGGGAGGAGAAATGGGGAGAAAATGGGGAAGAATGGGGAGAAAATGGGGAAAATGGGGAGTTGGGGGAGTTGGGGGG	105	1) CGGGGGGTTCCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCAC	100
	0 0	1 CATCAACTACCTGGGGCCGAGTCCCTGCGCCCGCTGGTGCAGACGCCC 	9. H
1   1   1   1   1   1   1   1   1   1	മ	GAGAACGAATGAAGTCCCACGTCATGAACCAACCATCAACA     :::	ēυ ,⊣
1   1   1   1   1   1   1   1   1   1	7	1 GGGACAAGGGCCTGTCCGACACGCCCTACGACAGTGCCACGTACGAG 	
1   1   1   1   1   1   1   1   1   1	2 2	1 AGCAAGTAATGTCGCCAAACGTAAGAGCTCTATGCCTCAGAAATTTCTT 	æ H
1   1   1   1   1   1   1   1   1   1	o ω	i banbanciisickaabatabaaticabaabaatiiticiisiisiikaabaa 	
	7	0ValileLysGluGluThrAsnHisAsnGluMetAl	ri
High   High	S	1 GCACACTGTACCCAGTCATTAAAGAAGAAACTAAGCACAGAGTGAAATGGC	
1	0		Ã
	0	1 GGAACATAAAGAGGGCTGCCACAACTACTTGGAAAGCATGGGCCTTCC	
	0	6	Ä
1	5	1 CACAAATGTGGATATTGTGGCCGAAGCTATAAACAGCGAACGTCTTTAG	ō
1   1   1   1   1   1   1   1   1   1	0 0	1 GGAGGGACCCCTCACTGGCCACCTGAGGACGCACTCGTTGGTAAACC	
1	7 2	1 TTCCGGGGAGAAGCCCTTCAAATGCCACCTCTGCAACTACGCCTGCGCCGC	
HrgGlyMet	o o	1 GGGGCCTCATTCACCCACAAGGGCAACCTGCTCCGGCACATCAAGCTGC 	
Hg	in m	1 TTCACAAAAGAGCCACACTGGAGAACGGCCCTTCCAGTGCAATCAGTG	
1		3	•
		1 AAAGTGTGATATCTGTGGGATCATTTGCATCGGGCCCAATGTGCTCATG	
		3	
	2	1 AGCTCGGCTTTGTCGGGAGTTGGAGGCATTCGACTTCCTAACGGAAAAC	
		3	•
		1 TGCTTGATGCCTCGGGAGAGAAAATGAATGGCTCCCACAGGGACCAAGG	
51 ArgGlyMet53 01 TGGGCGTGCTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTACGAA 25		3	
::   ArgGlyMet	S	1 TGGGCGTGCCTGTGAAATGAATGGGGAAGAATGTGCGGAGGATTTAACG	
101 AGAG1-CG1-GGC-CG1-GGC-CG1-GG-CG-CG-CG-CG-CG-CG-CG-CG-CG-CG-CG-CG-	53	ArgglyMet	4

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APPLICANT: Georgopoulos, Katia A.
TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
NUMBER OF SEQUENCES: 202
1051 AGG...CGCTCGGAGGGCACCCCGCGCTCCAACCACTCGGCCCAGGACAG 1097
                                                                                                      1098 CGCCGTGGAGTACCTGCTGCTCCTCCAAGGCCAAGTTGGTGCCCTCGG 1147
                                                                                                                                                                                                                1148 AGCGCGAGGCGTCCCCGAGCAACAGCTGCCAAGACTCCACGGACACCGAG 1197
                                                                                                                                                                                                                                                                                                                       1248 CGCCCGACGCGCGAACGC...GTGTCGCTCAAGGAGGAGCACCGCGCCT 1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1295 ACGACCTGCTGCGCGCCCTCCGAGAACTCGCAGGACGCGCTCCGCGTG 1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1345 GTCAGCACCAGCGGGGAGCAGATGAAGGTGTACAAGTGCGAACACTGCCG 1394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1395 GGTGCTCTTCCTGGATCACGTCATGTACACCATCCACATG......G 1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1436 GCTGCCACGGCTTCCGTGATCCTTTTGAGTGCAACATGTGCGGCTACCAC 1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1486 AGCCAGGACCGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCACCG 1535
                           237 .AlaValAspAsnLeuLeuLeuLeuSerIysAlaLysSerValSerSerG 253
                                                                                                                                                                                                                                                                                                                                                  270 SerAsnAlaGluGluGlnArgSerGlyLeuIleTyrLeuThrAsnHisII 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120 ValSerThrSerGlyGluGlnLeuLysValTyrLysCysGluHisCysAr 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   303 yrGluValLeuArgAlaAlaSerGluAsnSerGlnAspAlaPheArgVal 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:US-08-711-417C-200
                                                                                                                                                                                                                                              253 luargGluAlaSerProSerAsnSerCysGlnAspSerThrAspThrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 02110-2804
COMPUTER READBLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/711,417C
FILING DATE: 05-Sep-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/238,212
FILING DATE: 02-MAY-1994
APPLICATION NUMBER: 08/11,438
FILING DATE: 14-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seq_documentation_block:
; Sequence 200, Application US/08711417C
; Patent No. 6226611
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1536 CTTCCACATGAGC 1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1:::|||:::|||
386 gTyrHisLeuSer 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: MA
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300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84 etLeuAspAlaSerGlyGluLysMetAsnGlySerHisArgAspGlnGly 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 AGCTCGGCTTTGTCGGGAGTTGGAGGCATTCGACTTCCTAACGGAAAACT 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                351 AAAGTGTGATATCTGTGGGATCATTTGCATCGGGCCCAATGTGCTCATGG 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          401 TTCACAAAAGAAGCCACACTGGAGAACGGCCCTTCCAGTGCAATCAGTGC 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   451 GGGGCCTCATTCACCCAGAAGGGCAACCTGCTCCGGCACATCAAGCTGCA 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           501 ITCCGGGGAGAGCCCTTCAAATGCCACCTCTGCAACTACGCCTGCCGCC 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201 TGGGCGTGCCTGTGAATGAATGGGGAAGAATGTGCGGAGGATTTACGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       251 TGCTTGATGCCTCGGGAGAGAAATGAATGGCTCCCACAGGGACCAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       from: 1 to: 376
                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Identity: 63.724
             ATTORNEY/AGENT 14-SEP-1992
ATTORNEY/AGENT INFORMATION:
NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 10287/007001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-6070
                                                                                                                                                                                                                                                                                                                                                                                                            Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140 ......
                                                                                                                                                                                                                                                       TOPOLOGY: linear
MOLECULE TYPE: protein
FRAGMENT TYPE: internal
SEQUENCE DESCRIPTION: SEQ ID NO: 200:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 07/946,233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   alignment_block:
US-08-711-417C-165 x US-08-711-417C-200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Align seg 1/1 to: US-08-711-417C-200
                                                                                                                                                                                                                          LENGIH: 376 amino acids TYPE: amino acid
                                                                                                                                                              TELEX: 200154
INFORMATION FOR SEQ ID NO: 200:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                             Ratio: 4.565
Percent Similarity: 68.330
                                                                                                                                                                                                                                                                                                                                                                                                              Quality: 1625.00
                                                                                                                                                                                                                                                                                                                                    US-08-711-417C-200
                                                                                                                                                                                                                                                                                                                                                                                              alignment_scores:
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140 140
AGGGACGCCTCACTGGCCACCTGAGGACGCACTCCGTTGGTAAACCT 60
140140
TTGTGGCCGAAGCTATAAACAGCGAACGTC
140140
AGCGCTGCCACAACTACTTGGAAAGCATGGGCC
140140
CCAGTCATTAAAGAAGAAACTAAGCACAGTGAA
140 140
CAAGATAGGATCAGAGATCTCTCGTGCTGGACAGA
140 140
GCCTCAGAAATTTCTT
141G 141
851 GGGACAAGGGCCTGTCCGACACGCCCTACGACACGTGCCACGTACGAGAG 900
AACGAAATGAAGTCCCACGTGATGACGAAGCAATGACAACCG 95
58 Glu
951 CATCAACTACCTGGGGGCCGAGTCCCTGCGCTGGTGCAGACGCCCC 1000 
1001 CGGGCGGTTCCGAGGTGGTCCCGGTCATCAGCCGGATGTACCAGCTGCAC 1050      :::
10
CGGACACCGAG 1                   hrAspThrGlu 2
1198 AGCAACAACGGGGGGGGGGGGGTCTTATCTACCTGACCACAT 1247 
1248 CGCCCGACGCCAACGCGTGTCGCTCAAGGAGGACCCCGCGCT 1294   :::   :::  :::::::::::::
1295 ACGACCTGCTGCGCGCCCCCCGAGAACTCGCAGGACGCGCTCCGCGTG 1344   ::::::
1345 GTCAGCACCAGCGGGAGCAGATGAAGGTGTACAAGTGCGAACACTGCCG 1394 
1395 GGTGCTCTTCCTGGATCACGTCATGTACACCATCCACATGG 1435 

```
APPLICANT: Georgopoulos, Katia A.
APPLICANT: Georgopoulos, Katia A.
TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
NUMBER OF SEQUENCES: 202
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
1486 AGCCAGGACCGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCACCG 1535
                                                                                                                    356 SerGinAspargTyrGluPheSerSerHisileThrArgGlyGluHisAr 372
                                                                                                                                                                                                                                                                          seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:US-08-711-417C-175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY: USA
ZIP: 02110-2804
COMPUTER: RADABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows 95
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length: 236
Gaps: 1
Percent Identity: 97.881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    to: US-08-711-417C-175 from: 1 to: 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 10287/007001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELEX: 200154
INFORMATION FOR SEQ ID NO: 175:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/711,417C
FILING DATE: 05-Sep-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/238,212
FILING DATE: 02-MAY-1994
APPLICATION NUMBER: 08/121,438
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 07/946,233
FILING DATE: 14-SEP-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TOPOLOGY: linear; MOLECULE TYPE: protein; SEQUENCE DESCRIPTION: SEQ ID NO: 175: US-08-711-417C-175
                                                                                                                                                                                                                                                                                                                   seq_documentation_block:
    Sequence 175, Application US/08711417C
    Patent No. 6228611
    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alignment_block:
US-08-711-417C-165 x US-08-711-417C-175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 236 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Quality: 1210.00
Ratio: 5.216
Percent Similarity: 98.305
                                                                                                                                                                                  1536 CTTCCACATGAGC 1548
                                                                                                                                                                                                          1:::|||:::|||
372 gTyrHisLeuSer 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  alignment_scores:
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850 GGGGACAAGGGCCTGTCCGACACGCCCTACGACAGTGCCACGTACGAGAA 899

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APPLICANT: Georgopoulos, Katia A.
TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
NUMBER OF SEQUENCES: 202
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 225 Franklin Street
CITY: Boston
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1488 CCAGGACCGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCACCGCT 1537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1388 ACTGCCGGGTGCTCTTCCTGGATCACGTCATGTACACCATCCACATGGGC 1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1438 TGCCACGGCTTCCGTGATCCTTTTGAGTGCAACATGTGCGGCTACCACAG 1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1188 GGACACCGAGGAGCAACGAGGAGCAGCGCAGCGGTCTTATCTACCTGA 1237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1338 CCGCGTGGTCAGCACCAGCGGGGGGGAGTGAAGGTGTACAAGTGCGAAC 1387
                                                                                                                                                                                                                                 1000 CCGGGCGGTTCCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCA 1049
                                                                                                                                                                                                                                                                                                                   1050 CAGGCGCTCGGAGGGCACCCCGCGTCCAACCACTCGGCCCAGGACAGCG 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGCCCTCGGAGCGCGTCCCCGAGCAACAGCTGCCAAGACTCCAC 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1238 CCAACCACATGGCCGGACGCGCAACGCGTGTCGCTCAAGGAGGAGCAC 1287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1288 CGCGCCTACGACCTGCTGCGCGCCGCCTCCGAGAACTCGCAGACGCGCGT 1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    217 rGlnaspargTyrGluPheSerSerHisIleThrargGlyGluHisArgP 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201 CysHisGlyPheArgAspProPheGluCysAsnWetCysGlyTyrHisSe 217
                                                                                                                                                                                                                                                                                                                                                                                                                                         900 GGAGAACGAAATGATGAAGTCCCACGTGATGGACCAAGCCATCAACAACG 949
                                                                                                                                                950 CCATCAACTACCTGGGGGCCGAGTCCCTGCGCCGCTGGTGCAGACGCCC 999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq_name: /cgn2_6/ptcdata/2/iaa/6B_COMB.pep:US-08-711-417C-177
                                                                                                                                                                                                                                                                                                                                       1 GlyAspLysGlyLeuSerAspThrProTyrAspSerAlaThrTyrGluLy 17
                                                                                    17 sGluAsnGluMetMetLysSerHisValMetAspGlnAlaIleAsnAsnA 34
1100 CCGTGGAGTACCTGCTGCTCTCCAAGGCCAAGTTG.
                                                                                                                                                                                                                                                                                                                                                                                                                            seq_documentation_block:
; Sequence 177, Application US/08711417C
; Sequence 177, Application
; Patent No. 6228611
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1538 TCCACATG 1545
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1050 CAGG...CGCTCGGAGGGCACCCCGCGCTCCAACCACTCGGCCCAGGACA 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1097 GCGCCGTGGAGTACCTGCTGCTCTCCAAGGCCAAGTTGGTGCCCTCG 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1000 CCGGGCGGTTCCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAGCTGCA 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             850 GGGGACAAGGGCCTGTCCGACACGCCCTACGACAGTGCCACGTACGAGAA 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900 GGAGAACGAAATGATGAAGTCCCACGTGATGGACCAAGCCATCAACAACG 949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            950 CCATCAACTACCTGGGGGCCGAGTCCCTGGGGCGCTGGTGCAGACGCCC 999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM Compatible OPERATING SYSTEM: Windows 95 SOFTWARE: FastSEQ for Windows Version 2.0b CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dercent Identity: 97.899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SEQUENCE DESCRIPTION: SEQ ID NO: 177:
US-08-711-417c-177
                                                                                                                                                                                                                                                                                                                      NAME: Myers, Louis P.
REGISTRATION NUMBER: 35,965
REFERENCE/DOCKET NUMBER: 10287/007001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617/542-5070
TELEFAX: 617/542-8906
                                                                                                                           APPLICATION NUMBER: US/08/711,417C
FILING DATE: 05-Sep-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/238,212
FILING DATE: 02-MAY-1994
APPLICATION NUMBER: 08/121,438
FILING DATE: 14-SEP-1993
APPLICATION NUMBER: 07/946,233
FILING DATE: 14-SEP-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Align seg 1/1 to: US-08-711-417C-177 from: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   alignment_block:
US-08-711-417C-165 x US-08-711-417C-177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 238 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 177: SEQUENCE CHARACTERISTICS:
                   COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: Other LOCATION: 1...238 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ratio: 5.144
Percent Similarity: 97.899
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Quality: 1198.50
                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 200154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alignment_scores:
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